

Support chf



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OBESITY — ITS RELATIONSHIP TO HEART DISEASE AND HEALTH

Coronary artery disease affects more than 20 million people in the United States, and each year more than 600,000 persons die from myocardial infarction or "heart attack." The major factors recognized as predisposing to the development of coronary artery disease are hypertension (high blood pressure), smoking, obesity, increased blood lipids (cholesterol and triglycerides), lack of exercise, elevated levels of uric acid, diabetes mellitus, and a family history of heart disease.

In a recent study of heart disease patients at the Sacramento, California Medical Center, the factor associated most dramatically and significantly with heart disease, as compared with the normal, was *obesity*; this was especially true in patients with *premature* vascular disease. The effects of obesity on many of the other recognized "risk factors" are well-known and obesity may be the link that connects some of the other abnormalities together.

In another study at the Massachusetts Institute of Technology Clinical Research Center conducted by Dr. Robert S. Lees, it was found that weight reduction in obese patients who were only 7 to 18% over ideal body weight, produced a partial or complete return of blood lipids to normal in those patients who had elevated levels at the beginning of the study. This reduction in blood fats was accomplished without attempting to alter the percentages of saturated fats, unsaturated fats or cholesterol in the diet. Other benefits from weight reduction in his study were generally improved feelings of well-being, increased physical activity, significant blood pressure reductions, mild decreases in blood sugar levels, and drops in uric acid levels. Obesity, then, may indeed predispose an individual to premature heart disease and weight reduction will lower toward normal several of the other important risk factors for coronary artery disease.

There are known and measurable effects of obesity on the cardiovascular system in general. In

very obese subjects, there are consistent increases in cardiac or heart work which may result in heart enlargement and even heart failure. Underbreathing in the very obese person (Pickwickian Syndrome) may result in somnolence, twitchings, alterations in blood counts, heart enlargement, and heart failure. Increased blood pressure is common in the very obese and, as mentioned, may be reduced by weight loss. Indeed, most circulatory derangements associated with obesity can be reversed or significantly improved by weight reduction.

In addition to the effects of obesity on the heart and vascular system, there are also adverse effects on health in general. Insurance companies have given us the most information regarding the general medical significance of obesity. Actuarial studies have shown that mortality in men aged 15 to 69 is $\frac{1}{3}$ higher in those 20% or more overweight than "standard risk" men, and mortality is $\frac{1}{5}$ greater among men 10% or more overweight. When overweight men are compared to men with the most ideal weights, rather than "standard risk" men, the excess mortality is nearly $\frac{1}{2}$ for those 20% or more overweight and $\frac{1}{3}$ for those 10% or more overweight. This increase in mortality is associated with diabetes, gastrointestinal diseases, strokes and heart disease. Surgical procedures are more difficult in the obese individual and also account for some of the increased morbidity and mortality.

In short, then, obesity is not only a problem of physical appearance, but more importantly, it is related to increasing morbidity and mortality for the obese person. Fortunately, these adverse factors associated with obesity are reversible in large measure. Obesity however is not always a simple matter of overeating and may be associated with psychic or endocrine disorders. Therefore, reversal by weight reduction under *medical supervision* is strongly advised.

Fad diets are numerous; however, they are often not successful and they do not establish good eating habits which are necessary to maintain ideal weights later on.

The following table of desirable weights is reproduced from the Metropolitan Life Insurance Company. No discussion of obesity would be complete without a list of desirable weights.

DESIRABLE WEIGHTS

WOMEN—25 years of age and over (indoor clothing)

HEIGHT (shoes on)	SMALL FRAME	MEDIUM FRAME	LARGE FRAME
Ft. In.			
4 10	92-98	96-107	104-119
4 11	94-101	98-110	106-122
5 0	96-104	101-113	109-125
5 1	99-107	104-116	112-128
5 2	102-110	107-119	115-131
5 3	105-113	110-122	118-134
5 4	108-116	113-126	121-138
5 5	111-119	116-130	125-142
5 6	114-123	120-135	129-146
5 7	118-127	124-139	133-150
5 8	122-131	128-143	137-154
5 9	126-135	132-147	141-158
5 10	130-140	136-151	145-163
5 11	134-144	140-155	149-168
6 0	138-148	144-159	153-173

MEN—25 years of age and over (indoor clothing)

HEIGHT (shoes on)	SMALL FRAME	MEDIUM FRAME	LARGE FRAME
Ft. In.			
5 2	112-120	118-129	126-141
5 3	115-123	121-133	129-144
5 4	118-126	124-136	132-148
5 5	121-129	127-139	135-152
5 6	124-133	130-143	138-156
5 7	128-137	134-147	142-161
5 8	132-141	138-152	147-166
5 9	136-145	142-156	151-170
5 10	140-150	146-160	155-174
5 11	144-154	150-165	159-179
6 0	148-158	154-170	164-184
6 1	152-162	158-175	168-189
6 2	156-167	162-180	173-194
6 3	160-171	167-185	178-199
6 4	164-175	172-190	182-204

Statistical data from Metropolitan Life Insurance Co.

Some general facts of interest to the weight watcher are listed below.

(1) If we take in more calories than our bodies need the excess is stored as fat.

(2) With increasing age, metabolism and physical activity usually decrease, even though the level of appetite remains the same. Therefore, weight increases as a person takes in more food than he needs.

(3) Surplus calories regardless of whether they come from protein, carbohydrate or fat, are stored as fat.

(4) Overweight people have a shorter life expectancy, and are more prone to the vascular and degenerative diseases.

(5) Proteins and carbohydrates contain four calories per gram and fat contains nine calories per gram.

(6) Overweight people often eat too rapidly and have consumed large amounts of food before their body appetite regulating centers have a chance to act and reduce appetite.

(7) Too rapid weight loss often indicates a loss of muscle protein instead of fat. An ideal weight loss is between one to two pounds per week.

(8) Alcohol has no nutritional value and an eight-ounce glass of beer provides an extra 115 calories.

(9) Moderate exercise does not increase appetite and is a good way to maintain a desirable weight and keep fit.

(10) Skipping meals is a poor way to reduce weight since overeating often occurs at the next meal. Regular meals with smaller portions are more desirable.

(11) On a dietary program, weight should be taken at the same time each day since weight will vary throughout the day because of changes in the total amount of body water.

(12) Seven pounds of body fat hold one pint of water.

(13) Some salt restriction helps weight reduction.

(14) 4,000 calories make up one pound of fat.

(15) As little as 200 calories extra a day will, in the course of one year, lead to a storage of 18 pounds of fat.

(16) Because of our mechanized way of life, our caloric requirements are considerably less than previously; for example, a housewife's work which once required 250 calories an hour, now requires only 120 because of electrical appliances. A person commuting 2½ miles by walking uses up 210 calories; however, when he drives, he uses only 17 calories.

(17) A list of calories spent in various activities is shown in the following table.

RESTING, STANDING AND WALKING

	CALORIES PER MINUTE
Resting in bed	1.2
Sitting	1.4
Sitting, reading	1.4
Sitting, eating	1.6
Sitting, playing cards	1.7
Standing	1.6
Standing, light activity	2.8
Kneeling	1.4
Squatting	2.2
Walking, indoors	3.4
Walking, outdoors	6.1
Walking, downstairs	7.6
Walking, upstairs	20.0
Standing, showering	3.7

WORKING AROUND THE HOME

Washing clothes	2.9
Hanging laundry	4.7
Bringing in laundry	3.2
Machine sewing	1.5
Ironing clothes	4.2
Making beds	5.3
Mopping floors	5.3
Sweeping floors	1.7
Scrubbing floors	6.0
Shaking carpets	6.4
Peeling vegetables	2.9
Stirring, mixing foods	3.0

DO IT YOURSELF

Sawing wood	6.9
Planing wood	8.6
Carrying tools	3.6
Shovelling	7.1
Pushing wheelbarrow	5.2
Chopping wood	4.9
Stacking wood	6.1
Drilling	7.0

SPORTS AND HOBBIES

Football	10.1
Basketball	8.6
Ping pong	4.8
Swimming	12.1
Golfing	5.5
Tennis	7.0
Bowling	8.1
Badminton	2.8
Rowing	8.0
Sailing	2.6
Playing Pool	3.0
Dancing	4.0
Horseback riding	3.0
Cycling	8.0

HEALTH TOPICS

Jet Lag

To minimize the effects of "jet lag" or circadian rhythm disturbances in persons who air-travel long distances, Dr. George Catlett, New York regional medical director of United Air Lines, recommends that the traveller depart well-rested and that he plan no strenuous activities during the first 24 hours after arrival.

Because many body functions have approximately a 24-hour cycle (circadian rhythm), travel from one time zone to a significantly different one may be associated with a number of symptoms including fatigue, paradoxical insomnia, loss of appetite, dizziness, blurred vision, and at times confusion or depression. Shortening of the environmental cycle produces, usually, a more pronounced change than lengthening it. Flyers often report more difficulty when flying west to east, for example.

It is suggested that travellers choose daylight departures, and eat and drink with moderation before and during the flight. The problem is self-limited, and generally, "rest without napping during the daylight hours of the new time cycle and sleep after nightfall are usually all that is required."

Vitamin E

Despite many claims for the usefulness of Vitamin E supplements, Dr. Max Howett, of the St.

Louis University College of Medicine, who in 1960 proved Vitamin E essential in the human diet, believes there is no good evidence that it is under-supplied in the average American diet. Scientific data do not support the claims of its prolonging the health of tissue or its curing of disease.

Vitamin E is of no value in habitual miscarriages, sterility, impotency or neuromuscular disorders. There is no evidence to support claims of increasing longevity or restoring youth. Vitamin E deficiency states in humans are extremely unusual.

Long Scarf Caution

Doctor Mutaz B. Habal, in a recent article in the Journal of the American Medical Association, describes the hazards of wearing long scarves. He has collected eleven cases of injury or death resulting from the entanglement of the scarves' free floating ends into moving machinery. Ten of the eleven cases involved ski slopes or snowmobiles and five resulted in death by strangulation.

Persons should remove long scarves while near ski lifts, ski tows, snowmobiles, snow blowers, motorcycles or other machinery with rapidly moving parts.

With an increasing popularity in mechanized winter sports, special attention should be paid to practical and safe clothing. Safety regulations at ski slopes should include the removal of long scarves.

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